

(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property  
Organization  
International Bureau



(43) International Publication Date  
19 May 2005 (19.05.2005)

PCT

(10) International Publication Number  
**WO 2005/045437 A3**

(51) International Patent Classification<sup>7</sup>: **G01N 33/574**,  
C12Q 1/68

[DE/DE]; Saalburgstrasse 2a, 81375 München (DE).  
**SCHOCH, Claudia** [DE/DE]; Springerstrasse 8, 81477  
München (DE).

(21) International Application Number:

PCT/EP2004/012459

(22) International Filing Date:

4 November 2004 (04.11.2004)

(25) Filing Language:

English

(26) Publication Language:

English

(30) Priority Data:

03025340.5

4 November 2003 (04.11.2003)

EP

(71) Applicant (for DE only): **ROCHE DIAGNOSTICS  
GMBH** [DE/DE]; Sandhofer Strasse 116, 68305  
Mannheim (DE).

(71) Applicant (for all designated States except DE, US): **F.  
HOFFMANN-LA ROCHE AG** [CH/CH]; Grenzacher-  
strasse 124, CH-4070 Basel (CH).

(72) Inventors; and

(75) Inventors/Applicants (for US only): **HAFERLACH**,  
Torsten [DE/DE]; Springerstrasse 8, 81477 München  
(DE). **DUGAS, Martin** [DE/DE]; Michael-Fis-  
cher-Platz 6, 94469 Deggen Dorf (DE). **KERN, Wolfgang**  
[DE/DE]; Hanfelder Strasse 101, 82319 Starnberg (DE).  
**KOHLMANN, Alexander** [DE/DE]; Schwarzstrasse  
14, 92318 Neumarkt (DE). **SCHNITTGER, Susanne**

(81) Designated States (unless otherwise indicated, for every  
kind of national protection available): AE, AG, AL, AM,  
AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN,  
CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI,  
GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE,  
KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD,  
MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG,  
PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM,  
TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM,  
ZW.

(84) Designated States (unless otherwise indicated, for every  
kind of regional protection available): ARIPO (BW, GH,  
GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM,  
ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM),  
European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI,  
FR, GB, GR, HU, IE, IS, IT, LU, MC, NL, PL, PT, RO, SE,  
SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ,  
GW, ML, MR, NE, SN, TD, TG).

Published:

— with international search report

(88) Date of publication of the international search report:

15 September 2005

For two-letter codes and other abbreviations, refer to the "Guid-  
ance Notes on Codes and Abbreviations" appearing at the begin-  
ning of each regular issue of the PCT Gazette.

(54) Title: METHOD FOR DISTINGUISHING IMMUNOLOGICALLY DEFINED ALL SUBTYPES

(57) Abstract: Disclosed is a method for distinguishing immunologically defined ALL subtypes Pro-B-ALL, c-ALL, Pre-B-ALL, c-ALL/Pre-B-ALL, mature B-ALL, precursor B-ALL, Pro-T-ALL, Pre-T-ALL, cortical T-ALL, mature T-ALL, and/or T-ALL in a sample by determining the expression level of markers, as well as a diagnostic kit and an apparatus containing the markers.

Best Available Copy

WO 2005/045437 A3